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A field-useable guide in the form of a portable computer device for identifying natural items observed by a user from a collection of natural items comprising:

a housing for the portable computer device, the housing containing a programmed microprocessor, data storage, a display screen and a user input,

means in the microprocessor and data storage for displaying to the user a series of selectable attributes which vary among items in the collection of natural items, each attribute having one or more data types in which a plurality of values for such attributes are stored in the data storage,

the values for the various attributes being in a plurality of the following data types stored in the database for presentation to the user in a search conducted by the user:

- (a) descriptive text,
  - (b) number values,
  - (c) color images of items in the collection of items,
  - (d) sounds produced by items, in the case of a group of animals as the collection of items,
  - (e) moving pictures of items, in the case of animals as the items of the collection,
  - (f) color samples for matching to a feature of an observed item of a collection of items,
  - (g) silhouettes representative of groups of items within a collection of items, and
- search means associated with the microprocessor for enabling and prompting the user, on the display screen, to perform a step- by-step elimination search to identify an item observed in

the field by selecting an attribute, reviewing various values presented by the portable computer device as possible values under the subject attribute for the item observed in the field, then selecting a value for the attribute, then selecting another attribute, reviewing values presented as possibilities for that attribute and selecting a value, and continuing the stepwise elimination search to further reduce the number of possibilities in the items of the collection, the search means progressively eliminating non-matches from a list of possibilities,

and including elimination means associated with the microprocessor for eliminating further attributes which become irrelevant or redundant after selection by a user of a particular value for an attribute, and further including means associated with the microprocessor for eliminating certain values under particular attributes which values become irrelevant or redundant as choices due to prior selection of particular values under one or more previously selected attributes,

whereby the elimination means, in the step-by-step elimination search, assures against a null result of the search.

2. The field-usable guide of claim 1, wherein the portable computer device is internet enabled, and at least some of the values for at least some of the attributes including web links to further information or images, as a data type in which such values are stored.

3. The field-useable guide of claim 1, wherein the portable computer device is a PDA.

4. The field-useable guide of claim 1, wherein the portable computer device is a laptop

computer.

5. The field-useable guide of claim 1, wherein the portable computer device is a mobile phone with display.

6. The field-useable guide of claim 1, wherein the collection of natural items comprises a class of living things, and wherein the attributes include geographic location where observed.

7. The field-useable guide of claim 6, wherein the class of living things comprises birds, and wherein the attributes include silhouette, wingspan, color of a designated part of the bird, and eye color.

8. The field-useable guide of claim 6, wherein the class of living things comprises birds, and wherein the attributes include wingspan, body size and color of a designated part of the bird.

9. The field-useable guide of claim 8, wherein the attributes include voice, with the data types including sounds produced by the items.

10. The field-useable guide of claim 8, wherein the attributes include tail shape.

11. The field-useable guide of claim 8, wherein the attributes include wing type, as represented by images for values.

12. The field-useable guide of claim 8, wherein the attributes include eye color.
13. The field-useable guide of claim 8, wherein the attributes include patterns on various birds.
14. The field-useable guide of claim 1, wherein the search means includes means for enabling the user to select an order in which attributes are selected.
15. The field-useable guide of claim 1, wherein the means for displaying displays selectable attributes in a predetermined order, but wherein the search means includes means for enabling the user to select a desired order in which attributes are selected.
16. The field-useable guide of claim 1, wherein the means for displaying includes means for displaying visual icons representing groups of items among the collection of items.
17. The field-useable guide of claim 16, wherein the visual icons comprise silhouettes.
18. The field-useable guide of claim 1, wherein the search means and the means for displaying include a selectable show all feature with means for displaying to the user all items of the collection not eliminated, at a desired point in the user's search.
19. The field-useable guide of claim 1, wherein the search means and means for

displaying include means for indicating the number of items remaining in the list of possibilities of the collection, after the user's selection of one or more attributes and values under those attributes.

20. The field-useable guide of claim 1, wherein the user input comprises a touch screen for making selections.

21. The field-useable guide of claim 1, further including advanced search means associated with the microprocessor for enabling the user to perform a search wherein multiple attributes are selected in a single step, and a value selected under each attribute within such single step.

22. A method carried out by a field guide in the form of a portable computer device having a programmed microprocessor, data storage, a display screen and a user input, for facilitating a search to identify natural items observed by a user, from a collection of natural items, information about which is stored in the data storage with characteristics or attributes for the items comprising:

displaying to the user a series of selectable attributes which vary among items in the collection of natural items, each attribute having one or more data types in which a plurality of values for such attributes are stored in the data storage,

the values for the various attributes being in a plurality of the following data types stored in the database for presentation to the user during a search initiated by the user:

(a) descriptive text,

(b) number values,

(c) numerical ranges,

(d) color images of items in the collection of items,

(e) sounds produced by items, in the case of a group of animals as the collection of items,

(f) moving pictures of items, in the case of animals as the items of the collection,

(g) color samples for matching to an observed item of a collection of items,

(h) silhouettes representative of groups of items within a collection of items,

receiving an input from the user of a particular selected first attribute from the series of attributes,

displaying to the user all possible values under the selected attribute, in at least one of the data types (a) to (h), for the collection of natural items,

receiving the user's input selecting a value from among the series of possible values,

reviewing the items in the data storage following the user's selection of a value, and eliminating items precluded by such user selection and maintaining a list of remaining items, and eliminating further attributes which become irrelevant or redundant by the user's selection of a particular value for the first attribute, and also eliminating certain values under particular attributes, which values become irrelevant or redundant as choices due to prior selection of the particular value under the first attribute,

as the search progresses, continuing to review the remaining items in the data storage and continuing to narrow the number of choices for attributes that can be selected by elimination of

those attributes that are no longer useful in narrowing the search because of values selected by the user, and continuing to narrow the number of values in remaining attributes as the search progresses by elimination of those values that are no longer useful in narrowing the search, thereby preventing a null result for the search,

and displaying to the user a result in the form of an identified natural item from the collection of natural items.

23. The method of claim 22, further including, as the search progresses, displaying to the user a number of items remaining in the collection after the user has selected a value for an attribute.

24. The method of claim 22, further including, upon selection by the user, displaying all possibilities remaining in the collection of natural items after a user has selected a value for an attribute during the course of the search .

25. The method of claim 22, wherein the data type in which the values for the attributes are stored include at least text, number of values and images.

26. The method of claim 25, wherein the data types further include sounds produced by the items, in the case of a group of animals as the collection of items.

27. The method of claim 25, wherein the data types further include moving pictures of

an item in the case of animals as the item of the collection.

28. The method of claim 25, wherein the data types further include color samples for matching to a feature of an observed item in a collection of items.

29. The method of claim 25, wherein the data types further include a map image, for location as an attribute.

30. The method of claim 25, wherein the data types further include internet web links.

31. The method of claim 25, wherein the data types further include hypertext markup language (HTML).

32. The method of claim 22, further including enabling the user to select an advanced search mode and allowing the user to select a plurality of attributes and values for those attributes simultaneously rather than in stepwise fashion.

33. The method of claim 22, including permitting the user to enter more than one value for an attribute.

34. A method for creating and defining a computer database with selected content, in order to facilitate searching of the database using a computer program, the content comprising a



collection of natural items, comprising:

selecting at least some of the following data types for inclusion in the database, to enable searching using the data types:

- (a) descriptive text,
- (b) number values,
- (c) numerical ranges,
- (d) color images of items in the collection of items,
- (e) sounds produced by items, in the case of a group of animals as the collection of items,
- (f) moving pictures of items, in the case of animals as the items of the collection,
- (g) color samples for matching to an observed item of a collection of items,
- (h) silhouettes representative of groups of items within a collection of items,

defining a collection of characteristics or attributes for the items in the collection, each attribute having one or more of the data types in which it is stored in the database,

assigning a plurality of values in one or more of the data types to attributes defined in the database.

creating and entering natural items into the database, including assigning a name and icon for each item,

assigning attributes and values to the items in the database, as appropriate,

organizing the attributes into a hierarchial list to define an order in which the attributes will be presented to a user desiring to make a search of the database, and

saving the database to a selected computer device platform, for use by a user in browsing

or searching.

35. The method of claim 34, wherein the collection of natural items comprises a class of living things, and wherein the attributes include geographic location where the things are found.

36. The method of claim 35, wherein the class of living things comprises birds, and wherein the attributes include wingspan, body size and color of the designated part of the bird.

37. The method of claim 36, wherein the attributes include voice, with the data types including sounds produced by the items.

38. The method of claim 36, wherein the attributes include tail shape.

39. The method of claim 36, wherein the attributes include eye color.

40. The method of claim 34, wherein the computer device platform includes a display with touch screen for making selections.

41. The method of claim 34, wherein the assigning of attributes and values to items in the database comprises selecting an item and then selecting an attribute, then a value for the attribute for the particular item selected, then repeating the step of selecting a value for the particular attribute until every item for which the attribute is appropriate has been assigned a

value under the particular attribute; then proceeding with a next selected attribute and assigning a value for every item in the collection for which the next attribute is appropriate.

42. The method of claim 34, further including entering into the database attributes designated as non-searchable, whereby such non-searchable attributes and values under the attributes can be used for obtaining information on a specific item or group of items, but cannot be used as inputs in a search to identify an observed item.

43. The method of claim 34, wherein the step of creating and entering natural items into the database includes assigning a pictorial icon for each item.